

Claims

1. An antagonist of glucose-dependent insulintropic polypeptide (GIP) consisting essentially of a 24 amino acid polypeptide corresponding to positions 7-30 of the sequence of GIP.

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8. An antagonist of glucose-dependent insulintropic polypeptide (GIP).

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9. An antagonist according to claim 8, wherein said antagonist comprises at least an effective number of amino acids corresponding to those amino acids in posts 7-30 of the sequence of GIP or effective alternative sequences thereto.

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10. An antagonist according to claim 8, wherein said antagonist comprises a 24 amino acid polypeptide corresponding to positions 7-30 of the sequences of GIP or effective alternative sequences thereto.

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11. A pharmaceutical composition for preventing, inhibiting or reducing obesity in an animal comprising:

an effective amount of an antagonist of glucose-dependent insulintropic polypeptide (GIP) to inhibit, block or reduce glucose absorption from the intestine of the animal; and

an acceptable pharmaceutical carrier.

¹² 12. A pharmaceutical composition according to claim 11, wherein the antagonist comprises at least an effective number of amino acids corresponding to those amino acids in positions 7-30 of the sequence of GIP or effective alternatives thereto.

¹³ 13. A pharmaceutical composition according to claim 11, wherein the antagonist comprises a 24 amino acid polypeptide corresponding to positions 7-30 of the sequence of GIP or effective alternatives thereto.

¹⁴ 14. A pharmaceutical composition according to claim 11, said A pharmaceutical composition further including an inert pharmaceutical excipient selected from the group consisting of sweetening, flavoring, coloring, dispersing, disintegrating, binding, granulating, suspending, wetting, preservative and demulcent agents.

¹⁵ 15. An antagonist according to claim 8, wherein the antagonist is lyophilized.

¹⁶ 16. An antagonist of claim 15, wherein the lyophilized antagonist is reconstituted with a suitable diluent selected from the group consisting of normal saline, sterile water, glacial acetic acid, sodium acetate and combinations thereof.

¹⁷ 17. An antagonist according to claim 8, wherein said antagonist comprises at least an effective number of amino acids corresponding to those amino acids in positions 7-30 of the sequence of rat GIP, SEQ ID NO: 8, or effective alternative sequences thereto.

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19. An antagonist according to claim 8, wherein said antagonist comprises a 24 amino acid polypeptide corresponding to positions 7-30 of the sequence of rat GIP, SEQ ID NO: 8, or effective alternative sequences thereto.

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20. An antagonist according to claim 11, wherein said antagonist comprises at least an effective number of amino acids corresponding to those amino acids in positions 7-30 of the sequence of rat GIP, SEQ ID NO: 8, or effective alternative sequences thereto.

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21. An antagonist according to claim 11, wherein the antagonist comprises a 24 amino acid polypeptide corresponding to positions 7-30 of the sequence of rat GIP, SEQ ID NO: 8, or effective alternative sequences thereto.

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22. A polypeptide having an amino acid sequence which specifically interferes with the biological activity of GIP when said polypeptide is administered in an effective amount to an animal.

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23. A polypeptide according to claim 22, wherein said polypeptide comprises at least an effective number of amino acids corresponding to those amino acids in positions 7-30 of the sequence of human GIP, SEQ ID NO: 2, or effective alternative sequences thereto.

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24. A polypeptide according to claim 22, wherein the polypeptide comprises 24 amino acids in positions 7-30 of the sequence of human GIP, SEQ ID NO: 2, or effective alternative

sequences thereto.

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25. A polypeptide according to claim 22, wherein said polypeptide comprises at least an effective number of amino acids corresponding to those amino acids in positions 7-30 of the sequence of rat GIP, SEQ ID NO: 8, or effective alternative sequences thereto.

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26. A polypeptide according to claim 22, wherein the polypeptide comprises 24 amino acids in positions 7-30 of the sequence of rat GIP, SEQ ID NO: 8, or effective alternative sequences thereto.

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27. A polypeptide according to claim 22, wherein said polypeptide comprises at least an effective number of amino acids corresponding to those amino acids in positions 16-30 of the sequence of human GIP, SEQ ID NO: 3, or effective alternative sequences thereto.

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28. A polypeptide according to claim 22, wherein the polypeptide comprises 15 amino acids in positions 16-30 of the sequence of human GIP, SEQ ID NO: 3, or effective alternative sequences thereto.

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29. A polypeptide according to claim 22, wherein said polypeptide comprises at least an effective number of amino acids corresponding to those amino acids in positions 16-30 of the sequence of rat GIP, SEQ ID NO: 9, or effective alternative sequences thereto.

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30. A polypeptide according to claim 22, wherein the polypeptide comprises 15 amino acids in positions 16-30 of the sequence of rat GIP, SEQ ID NO: 9, or effective alternative sequences thereto.

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31. A polypeptide according to claim 22, wherein said polypeptide comprises at least an effective number of amino acids corresponding to those amino acids in positions 10-30 of the sequence of human GIP, SEQ ID NO: 5, or effective alternative sequences thereto.

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32. A polypeptide according to claim 22, wherein the polypeptide comprises 21 amino acids in positions 10-30 of the sequence of human GIP, SEQ ID NO: 5, or effective alternative sequences thereto.

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33. A polypeptide according to claim 22, wherein said polypeptide comprises at least an effective number of amino acids corresponding to those amino acids in positions 10-30 of the sequence of rat GIP, SEQ ID NO: 10, or effective alternative sequences thereto.

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34. A polypeptide according to claim 22, wherein the polypeptide comprises 21 amino acids in positions 21-30 of the sequence of rat GIP, SEQ ID NO: 10, or effective alternative sequences thereto.

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35. A polypeptide according to claim 22, wherein said polypeptide comprises at least an effective number of amino acids corresponding to those amino acids in positions 21-30 of the

sequence of rat GIP, SEQ ID NO: 13, or effective alternative sequences thereto.

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36. A polypeptide according to claim 22, wherein the polypeptide comprises 10 amino acids in positions 21-30 of the sequence of rat GIP, SEQ ID NO: 13, or effective alternative sequences thereto.

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37. A polypeptide according to claim 22, wherein said polypeptide comprises at least an effective number of amino acids corresponding to those amino acids in positions 31-44 of the sequence of rat GIP, SEQ ID NO: 13, or effective alternative sequences thereto.

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38. A polypeptide according to claim 22, wherein the polypeptide comprises 14 amino acids in positions 31-44 of the sequence of rat GIP, SEQ ID NO: 13, or effective alternative sequences thereto.

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39. A polypeptide having an amino acid sequence which specifically interferes with the biological activity of GIP when said polypeptide is administered in an effective amount to an animal, said polypeptide comprising at least those amino acids corresponding to positions 7-9 of GIP, SEQ ID NO: 6.

³³
40. A polypeptide according to claim 39, wherein the polypeptide comprises 24 amino acids corresponding to positions 7-30 of the sequence of human GIP, SEQ ID NO: 2, or effective alternative sequences thereto.

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Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	